
MASON COUNTY

(Mason County Water Service Area Map)

- Estimated 1999 population of 16,700--85% on public water
- Estimated 2020 population of 15,600--89% on public water
- 280 miles of water lines, with plans for 57 additional miles
- Estimated funding needs for public water 2000-2005: \$829,000
- Estimated funding needs for public water 2006-2020: \$1,474,000

Mason County had an estimated population of 16,661 (6,854 households) in 1999 with a projected population of 15,606 (6,896 households) in 2020. Public water is provided to about 85% percent of the county's residents. In areas of the county not served by public water, about 1/5 of the households rely on private domestic wells and 4/5 of the households rely on hauled water, cisterns and other sources. About 285 customers will be added to public water service through new line extensions in 2000-2020.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	In \$1000	in \$1000	in \$1000	in \$1000	in \$1000
MASON								-
Western Mason W/D	19.6	98	784				45	829
MASON TOTAL	19.6	98	784				45	829

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
MASON								-
Southern Mason W/D	6.2	31	250					250
Western Mason W/D	30.6	153	1,224					1,224
MASON TOTAL	36.8	184	1,474					1,474

PUBLIC WATER SYSTEMS

Mason County is served by six water systems: Maysville Utilities, Western Lewis Rectorville Water District, Western Mason Water District, Southern Mason Water District, Buffalo Trail Water Association and Fleming County Water Association.

WATER SERVICE AREAS

MASON COUNTY

Kentucky

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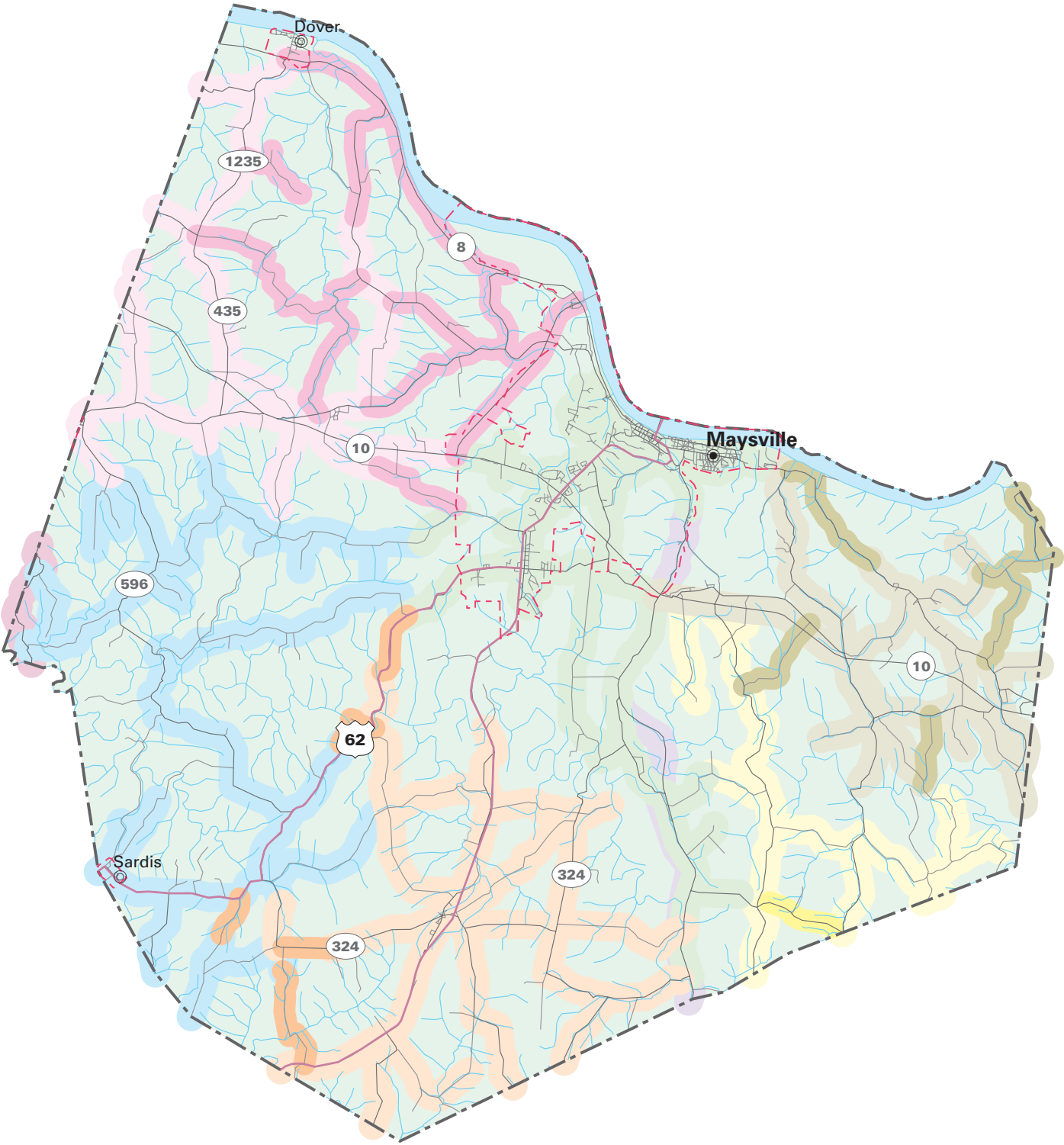
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WATER SERVICE STATUS BY OWNER

EXISTING SERVICE AREA	PROPOSED SERVICE AREA	
		WESTERN MASON WATER DISTRICT
		WESTERN LEWIS RECTORVILLE WATER DISTRICT
		SOUTHERN MASON WATER DISTRICT
		MAYSVILLE UTILITY COMMISSION
		FLEMINGSBURG UTILITY SYSTEM
		FLEMING COUNTY WATER ASSOCIATION
		BUFFALO TRAIL WATER ASSOCIATION
		BRACKEN COUNTY WATER DISTRICT



MAYSVILLE UTILITY COMMISSION

PWSID: 0810275
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source: RESERVOIR
Purchase Source:
Well Source:
Sells Water to: FLEMINGSBURG UTILITY SYSTEM
Treatment Plant Capacity (MGD): 4.00
Percent Daily Average Production: 62.00
Total Tank Storage Capacity (gallons): 10,000.00
Total Service Connections: 4,968.00
Number of Employees: 0.00
Treatment Operator Class: 2D
Distribution Operator Class: 4A
Customer Rate for 1,000 Gallons: Not available
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons): Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

Maysville Utilities serves the entire corporate limits of Maysville and some areas outside the city limits. Maysville Utilities also sells water to the City of Flemingsburg, Western Lewis Rectorville Water District, Buffalo Trail Water Association, Southern Mason Water District and Western Mason Water District.

Maysville has not identified any line extension projects, but realizes approximately 9 households are located outside city limits and are not practical for a traditional delivery system. Maysville's source is the Ohio River.

SOUTHERN MASON WATER DISTRICT

PWSID: 0810409
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source: LICKING RIVER
Purchase Source: WESTERN FLEMING WATER DISTRICT
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (gallons): 25,000.00
Total Service Connections: 531.00
Number of Employees: 2.00
Treatment Operator Class: 2D
Distribution Operator Class:

Customer Rate for 1,000 Gallons:.....	4.60
O/M costs 1997:.....	181,219.00
O/M costs per Service Connection:	359.56
Net Revenue 1997:.....	53,378.00
Total Water Produced 1997 (gallons):.....	0.00
Water Sold 1997 (gallons):.....	44,095,000.00
Unaccounted-for Water 1997 (%):	23.90

Southern Mason Water District serves the southern portion of Mason County and includes the community of May's Lick. The District purchases all of its water. Southern Mason has water purchase agreements with both Maysville and Western Fleming Water District. Approximately 6.2 miles of scattered extensions serving 31 households were identified as a long-term project. Twenty-eight households were deemed not practical for normal line extension projects.

WESTERN MASON COUNTY WATER DISTRICT

PWSID:.....	0810460
System Type:.....	COMMUNITY
Owner Type:.....	WATER DISTRICT
Surface Source:	
Purchase Source:	
Well Source:	Yes
Sells Water to:	
Treatment Plant Capacity (MGD):.....	0.31
Percent Daily Average Production:.....	59.00
Total Tank Storage Capacity (gallons):	50,000.00
Total Service Connections:	675.00
Number of Employees:.....	2.00
Treatment Operator Class:	
Distribution Operator Class:.....	2BD
Customer Rate for 1,000 Gallons:.....	2.52
O/M costs 1997:.....	134,554.00
O/M costs per Service Connection:	164.49
Net Revenue 1997:.....	11,625.00
Total Water Produced 1997 (gallons):.....	76,447,000.00
Water Sold 1997 (gallons):.....	73,710,600.00
Unaccounted-for Water 1997 (%):	2.27

Western Mason Water District is located within the City of Dover. Western Mason serves the western portion of Mason County. Currently the District gets its water from wells located in Dover. The District also purchases some water from Maysville. The District does not have treatment, but it does add chlorine to the water. Western Mason has filed an application for federal funding for approximately 19.6 miles serving 98 new households. Approximately 30.6 miles are identified as long-term extensions, which include 153

households. Thirty-six (36) households were identified as not feasible and require a non-traditional delivery system.

WESTERN LEWIS RECTORVILLE WATER DISTRICT

PWSID: 0810366
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:
Purchase Source: MAYSVILLE UTILITY COMMISSION
Well Source: Yes
Sells Water to:
Treatment Plant Capacity (MGD): 0.29
Percent Daily Average Production: 84.00
Total Tank Storage Capacity (gallons): 100,000.00
Total Service Connections: 1,050.00
Number of Employees: 6.00
Treatment Operator Class:
Distribution Operator Class: 2BD
Customer Rate for 1,000 Gallons: 4.76
O/M costs 1997: 353,895.00
O/M costs per Service Connection: 278.00
Net Revenue 1997: 147,801.00
Total Water Produced 1997 (gallons): 108,236,000.00
Water Sold 1997 (gallons): 75,943,000.00
Unaccounted-for Water 1997 (%): 24.59

Western Lewis Rectorville Water District located in eastern Mason County and Western Lewis County has identified projects in both Mason and Lewis Counties. See narrative in Lewis County section.

BUFFALO TRAIL WATER ASSOCIATION

PWSID: 0810046
System Type: COMMUNITY
Owner Type: WATER ASSOCIATION
Surface Source:
Purchase Source: WESTERN FLEMING WATER DISTRICT
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (gallons): 200,000.00
Total Service Connections: 0.00
Number of Employees: 0.00
Treatment Operator Class: 2D
Distribution Operator Class:
Customer Rate for 1,000 Gallons: 5.91
O/M costs 1997: 198,935.00
O/M costs per Service Connection: 248.67
Net Revenue 1997: 8,827.00

Total Water Produced 1997 (gallons):.....	0.00
Water Sold 1997 (gallons):.....	71,482,000.00
Unaccounted-for Water 1997 (%):	28.18

Buffalo Trail Water Association located in Sardis, Kentucky, serves both Mason and Robertson Counties. Approximately 23 miles of scattered extensions, located in both Mason and Robertson Counties, to serve 149 households has been identified as immediate projects. 70 households all located in Robertson County has been identified as not feasible for traditional line extensions.

FLEMING COUNTY WATER ASSOCIATION

Fleming County Water Association also serves some Mason County residents. Fleming County Water does not plan to add any new lines in Mason County.

PRIVATE DOMESTIC SYSTEMS

About 2,500 residents of Mason County rely on private domestic water supplies: about 500 on wells and 2,000 on other sources.

The alluvium along the Ohio River is the best source of ground water in the county. Many properly constructed drilled wells will produce several hundred gallons per minute from the alluvium, with most wells able to produce enough for a domestic supply at depths of less than 100 feet. Water is hard or very hard but otherwise of good quality.

In the lower sections of the larger creek valleys discharging into the Ohio River in Mason County most drilled wells will produce enough water for a domestic supply at depths of less than 100 feet. Some wells located in the major creek valleys will produce enough water for a domestic supply except during dry weather. In the upland areas of Bracken County, which encompasses 70% of the county, most drilled wells will not produce enough water for a dependable domestic supply except along drainage lines that may produce enough water except during dry weather. Ground water in these areas is hard or very hard and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet.
